

REMARKS

Applicants have amended the specification to insert the SEQ ID numbers of the sequences disclosed in the specification. Applicants have also amended the specification at the paragraph bridging pages 50 and 51 to remove the periods between every third nucleotide in the nucleotide sequences. The foregoing amendments add no new matter.

The present application is a continuation of U.S. Application No. 09/626,813, filed July 27, 2000. The Examiner finally rejected claims 57-59 in that application in the Office Action mailed May 20, 2003 ("Final Office Action"). Applicants filed an Amendment After Final on November 20, 2003 ("Amendment After Final"). In the Advisory Action mailed January 13, 2004 ("Advisory Action"), the Examiner indicated that he did not enter the Amendment After Final, because the proposed amendment to claim 57 raised new issues.

Applicants then filed this continuation application on April 20, 2004, along with a Preliminary Amendment. Upon entry of that Preliminary Amendment, claims 1-3, 7-14, 23-25 and 57-59 are pending and are identical to the claims previously under consideration in the prior application, had the Examiner entered the Amendment After Final. Applicants also note that the Examiner allowed claims 1-3, 7-14, and 23-25 in the prior application. Therefore, the Examiner should allow those claims in the present application.

Upon entry of the present Supplemental Preliminary Amendment, the specification is identical to the specification as amended in the prior application.

Applicants now respond to the outstanding rejection in the Final Office Action and the comments in the Advisory Action in the prior application.

I. Rejection of Claims 57-59 Under 35 U.S.C. § 112, First Paragraph

In the Final Office Action, the Examiner rejected claims 57-59 under 35 U.S.C. § 112, first paragraph, alleging that “. . . the specification, while being enabling for a polynucleotide which encodes the amino acid sequence of SEQ ID NO:66, does not reasonably provide enablement for a polynucleotide encoding an amino acid sequence possessing 80% identity to SEQ ID NO:66.” Final Office Action at page 3. Without acquiescing to the Examiner’s rejection, Applicants amended claim 57 to replace “80% identity” with “95% identity.” Amendment After Final at pages 10 and 13-15. In the Advisory Action, the Examiner maintained the rejection as follows:

Applicants contend that amino acid sequences that possess 95% identity typically retain function, even when the relationship between the sequence of a peptide and its tertiary structure are not known, is not persuasive as it is somewhat unclear as to what “function” the encoded polypeptides would have.

Advisory Action Continuation Sheet, Continuation of 5.

Applicants respectfully traverse the rejection. The specification provides guidance “as to what ‘function’ the encoded polypeptides would have” as well as exemplary assays for such functions. See, e.g., specification at page 11, description of Figure 18; page 49, under subheading “D. Gel shift assay”; page 60, first full paragraph; and paragraph bridging pages 60-61. Thus, one skilled in the art could routinely determine whether “an amino acid sequence possessing 95% identity to SEQ ID NO:66” has a function similar to SEQ ID NO:66.

Furthermore, the specification provides guidance concerning amino acid residues of SEQ ID NO:66 that may be modified, resulting in a polypeptide that has a function similar to SEQ ID NO:66. For example, the specification indicates that *E. coli* replication factor A ("RFA") and the large subunit of eukaryotic RFA are known in the art. See, e.g., specification at page 3, lines 11-14, and paragraph bridging pages 59-60. Therefore, one skilled in the art could align the sequences of those polypeptides with SEQ ID NO:66 to determine which amino acid residues are conserved and which are not conserved among *E. coli*, eukaryotes, and archaea. Conserved amino acids are more likely to be important for function than non-conserved amino acids. Thus, one skilled in the art would predict that modification of the non-conserved amino acids of SEQ ID NO:66 would likely result in a polypeptide that has a function similar to SEQ ID NO:66.

Therefore, the specification enables "a polynucleotide encoding an amino acid sequence possessing 95% identity to SEQ ID NO:66." Claim 57 is thus enabled, as are claims 58 and 59, which depend from claim 57. Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, first paragraph.

Please grant any extensions of time required to enter this response, and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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